

CLAIMS

1. A substrate processing system comprising:
 - a gas supply source for supplying a process gas containing a reactive substance;
 - 5 a reservoir tank connected to said gas supply source for reserving said process gas;
 - a reactor for exposing a substrate placed therein to said process gas;
 - 10 a first circulation pipe for introducing the process gas inside said reactor into said reservoir tank;
 - a second circulation pipe for introducing at least part of the process gas in said reservoir tank into said reactor; and
 - 15 a flow regulating valve disposed in said second circulation pipe for regulating the amount of process gas to be introduced into said reactor.
2. The substrate processing system of Claim 1, further comprising a pump for drawing said process gas from said reactor and introducing it into said reservoir tank through said first circulation pipe.
3. The substrate processing system of Claim 1 or 2, further comprising a second gas supply source for supplying a second process gas to said reactor such that the second process gas bypasses said reservoir tank, said second process gas containing a reactive substance different from that contained in said first process gas.